

I CLAIM:

1. A tread for a tire having a preferred direction of travel, the tread comprising a plurality of tread pattern elements, each element being defined by cutouts of longitudinal and transverse general orientation, each element having an upper contact face and lateral faces extending in the direction of the thickness of the tread, the intersection of each lateral face with the upper contact face forming a ridge, the ridge which is first to come into contact with a road surface forming the leading edge of the element, the ridge which is last to emerge from the contact forming the trailing edge of the element; the plurality of tread pattern elements comprising a plurality of wells of section S and of depth H which open on to contact faces, each element being divided into a front section and a rear section by a virtual median plane P_v , said median plane P_v being perpendicular to the upper contact face of the element and to the longitudinal direction of the tread and passing through the center of mass G of the contact face of the element when new, the front section comprising the leading edge and the rear section comprising the trailing edge; wherein for each tread pattern element that is provided with at least one well, the volume V_{pa} of all the wells located in the front section of the tread pattern element is greater than the volume V_{pf} of all the wells located in the rear section of the tread pattern element when the tread is new.

2. A tread according to Claim 1, wherein the wells have depths at least equal to 5 mm.

3. A tread according to Claim 2, wherein the wells are arranged along at least two lines substantially parallel to the leading edge, the depths of the wells of two successive lines being different.

4. A tread according to Claim 3, wherein the wells are arranged along at least two lines substantially parallel to the leading edge, the wells having sections S of between 0.2 mm^2 and 12 mm^2 , the sections of the wells of two successive lines being different.

5. A tread according to Claim 2, wherein the wells have their depths H which decrease gradually from a distance L from the leading edge towards the trailing edge.

6. A tread according to Claim 1, wherein, on the contact face of at least one tread pattern element, the average number of wells per square centimeter is less than or equal to 15.

7. A tread according to Claim 6, wherein, on the contact face of at least one tread pattern element, the number of wells per square centimeter decreases substantially from the leading edge towards the trailing edge.

8. A tread according to Claim 1, wherein the axis of each well is substantially perpendicular to the contact face of each tread pattern element when new.

9. A tread according to Claim 1, wherein at least one well of a tread pattern element has a main axis forming an angle other than zero with a direction perpendicular to the contact face of the tread pattern element.

10. A tread according to Claim 1, wherein the main axis of at least one well of a tread pattern element has an inclination relative to a line perpendicular to the contact face of said element which is not constant in the thickness of the tread.

11. A tire having a tread which is provided with a tread pattern which imparts to the tire a preferred direction of travel, the tread comprising a plurality of tread pattern elements, each tread pattern element having an upper contact face and lateral faces extending in the direction of the thickness of the tread, the intersection of each lateral face with the upper face forming a ridge, the ridge which is first to come into contact with a road surface forming the leading edge of the element, the ridge which is last to emerge from the contact forming the trailing edge of the element; at least a plurality of tread pattern elements comprising a plurality of wells of section S and of depth H which open on to the contact face of said elements; each element being divided into a front section and a rear section by a virtual median plane Pv, said median plane Pv being perpendicular to the upper contact face of the element and to the longitudinal direction of the tread and passing through the center of mass G of the contact face of the element when new, the front section comprising the leading edge and the rear section comprising the trailing edge; the tread being characterized in that, when new and for each tread pattern element which is provided with wells, the wells have sections of between 0.2 mm^2 and 12 mm^2 , and in that the volume Vpa of all the wells located in the front section of the tread pattern element is greater than the volume Vpf of all the wells located in the rear section of said element.

12. A tire according to Claim 11, wherein at least the tread pattern elements located in the median region of its tread are provided with wells.

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